Under the Paperwork Reduction of 1995, no person U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE are required to respond to a collection of information unless it displays a valid OMB control number.

1 K	KAINS	MITTAL LEFFER TO	THE	UNITED ST	ATES RECEIVING OFFICE		
Express Mail mailing number:				Date of deposit: 19 October 2005			
File reference no.: GRA26 011				International application no. (if known): PCT/US2003/032579			
Title of the inve	ntion:	NETWORK OVERLAY LOCATION	N SYSTE	M AND METHOD FO	OR AIR INTERFACE WITH FREQUENCY HOPPING		
Earliest priority date claimed (Day/Month/Year): 16 October 2002							
☐ This is a	new I	nternational Application		~			
SCREENING DISCLOSURE INFORMATION:							
In order to assist in screening the accompanying international application for purposes of determining whether a license for foreign transmittal should and could be granted and for other purposes, the following information is supplied. (check as many boxes as apply):							
☐ The inven	ntion d	isclosed was not made in the	United	States of Americ	a.		
☐ There is n	o prio	r U.S. application relating to t	his inve	ention.			
The following prior U.S. application(s) contain subject matter which is related to the invention disclosed in the attached international application. (NOTE: priority to these applications may or may not be claimed on the Request (form PCT/RO/101) and this listing does not constitute a claim for priority.)							
application n	ю.			filed on			
application n	0.			filed on			
identified above. The additional subject matter is found on pages and DOES NOT ALTER MIGHT BE CONSIDERED TO ALTER the general nature of the invention in a manner which would require the U.S. application to have been made available for inspection by the appropriate defense agencies under 35 U.S.C. 181 and 37 C.F.R. 5.15.  Itemized list of contents							
Sheets of Reque	est for	m:	Che	Check no.:			
Sheets of description			Ret	Return receipt postcard:			
Sheets of claims	s:		Pov	Power of attorney:			
Sheets of abstract:			Cer	Certified copy of priority document (specify):			
Sheets of drawings:			Oth	er (specify):			
				Transmittal Letter to US DO/EO, including executed Combined Declaration and Power of Attorney; Copy of Notice to File Missing Requriements; Form			
Sequence listing diskette/CD:			Co				
Tables related to sequence listing CD:			PT	O-1595, inclu	uding executed Assignment		
The person signing this		Applicant		Mark C. Comtois			
form is:	<b>V</b>	Attorney/Agent (Reg. No.) 46,285	N	ame of person signing	g		
		Common Representative		May Constitute	Combon		

This collection of information is required by 37 CFR 1.10 and 1.412. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO-1390 (Rev. 02-2005) r use through 3/31/2007. OMB 0651-0021 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

### TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

A power of attorney and/or change of address letter.

20.

ATTTORNEY'S DOCKET NUMBER GRA26 011 10/531,041

U.S. APPLICATION NO. (If known, see 37 CFR 1.5) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371 INTERNATIONAL APPLICATION NO. INTERNATIONAL FILING DATE PRIORITY DATE CLAIMED PCT/US2003/032579 16 OCTOBER 2003 16 OCTOBER 2002 TITLE OF INVENTION NETWORK OVERLAY LOCATION SYSTEM AND METHOD FOR AIR INTERFACE WITH FREQUENCY HOPPING APPLICANT(S) FOR DO/EO/US Joseph P. KENNEDY, Jr.; John P. CARLSON; Thomas B. GRAVELY and Bob BRICKHOUSE Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. The US has been elected (Article 31). A copy of the International Application as filed (35 U.S.C. 371(c)(2)) is attached hereto (required only if not communicated by the International Bureau). has been communicated by the International Bureau. is not required, as the application was filed in the United States Receiving Office (RO/US). An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). is attached hereto. has been previously submitted under 35 U.S.C. 154(d)(4). Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) are attached hereto (required only if not communicated by the International Bureau). have been communicated by the International Bureau. have not been made; however, the time limit for making such amendments has NOT expired. have not been made and will not be made. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). [[√] An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). Items 11 to 20 below concern document(s) or information included: 11. 🔲 An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 12. 🗸 An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13 A preliminary amendment. An Application Data Sheet under 37 CFR 1.76. A substitute specification.

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1,821-1,825.

A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).

A second copy of the published International Application under 35 U.S.C. 154(d)(4).

Other items or information: Copy of Notification of Missing Requirements

Page 1 of 2

U.S. APPLICATION NO. (if known, see 37 CFR 1.5) INTERNATIONAL APPLICATION NO. (International profiles) (International pro		Unde	er the Paperwork Red	uction Act of 1995.	, no persons are required to respon	U.S. Patent and Trad	pproved for use through 3/31, emark Office; U.S. DEPARTN	MENT OF COMMERCE		
10/631,041 PCTRUS2003/032579 GRA25 011 The following fees have been submitted 2.			Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of info U.S. APPLICATION NO. (if known, see 37 CFR 1.5) INTERNATIONAL APPLICATION NO.							
The fallowing fees have been submitted   \$300   \$			<b>(</b>	• •						
21.			lowing fees have h	een submitted	. 0.7,002000,00			PTO LISE ONLY		
22. Examination fee If Interdictional perimitary examination report prepared by USPTO and all claims satisfy provisions of If Interdictional perimitary examination report prepared and pure situations.  23. All other initiations.  23. Search fee (37 CFR 1.445(p)(2)) has been paid on the international application to the USPTO as an infernational Search Report prepared and provided to the Office.  34.00  All other situations.  54.00  All other situations.  54.00  All other situations.  54.00  All other situations.  54.00  All other situations.  55.00  \$  TOTAL OF 21, 22 and 23 =  Additional fee for specification and drawings field in paper over 100 sheets (excluding security).  55.00  Total Sheets Estra Sheets.  55.00  Total Sheets Estra Sheets.  55.00  Total Sheets Estra Sheets.  55.00  Total drawing the state of the specification and drawings field in paper or the time of count up to a whole number).  75.01  75.01  75.02  Surcharge of \$130.00 for furnishing the cath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.462(b)).  CLUMINS NUMBER FILED NUMBER EXTRA RATE \$  Total claims  75.00  75.01  75.01  75.01  75.02  75.02  75.02  75.03  75.03  75.04  75.04  75.05  75.0		I _	•			\$300		1 10 032 0121		
If Intermational preliminary examination report prepared by USPTO and all claims satisfy provisions of PCT Antide 3(1)(1)(4)										
Search fee (37 CFR 1.445(a)(2) has been paid on the international application to the USPTO as an International Searching Authority		If International p PCT Article 3	oreliminary examina 3(1)-(4)	\$100	\$					
Additional fee for specification and drawings field in paper over 100 sheets (excluding sequence Issing) or computer program Issing field in an electronic medium). The fee is \$230 for each additional 50 sheets of paper or fraction thereof.  Total Sheets		Search fee (37 ( International Sea	OFR 1.445(a)(2)) had broad Searching Autoarch Report prepare	\$						
sequence listing or computer program listing filed in an electronic medium).  The fee is \$250 for each additional 50 sheets of pages or fraction thereof.  Total Sheets			TOTAL OF 21, 22	and 23 =			\$			
Sucharge of \$130.00 for furnishing the earlier of declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).    CLAIMS   NUMBER FILED   NUMBER EXTRA   RATE   \$   Total claims   -20 = 0   x \$500   \$     Independent claims   -3 = 0   x \$500   \$     MULTIPLE DEPENDENT CLAIM(\$) (if applicable)   + \$360   \$     MULTIPLE DEPENDENT CLAIM(\$) (if applicable)   + \$360   \$     Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by ½.    Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).    Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31), \$40.00 per property   \$40.00     TOTAL FEES ENCLOSED   \$170.00     TOTAL FEES ENCLOSED   \$170.00     A check in the amount of \$ 170.00   to cover the above fees is enclosed.   A check in the amount of \$ 170.00   to cover the above fees is enclosed.   A check in the amount of \$ 170.00   to cover the above fees is enclosed.   C			sting or computer p							
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest  CLAIMS NUMBER FILED NUMBER EXTRA RATE S  Total claims -20 = 0		Total Sheets	Extra Sheets			RATE				
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).  CLAIMS NUMBER FILED NUMBER EXTRA RATE \$  Total claims -20 = 0		- 100 =	/50 =			x \$250	\$			
Total claims					\$	·				
Independent claims		CLAIMS	NUMB	ER FILED	NUMBER EXTRA	RATE	\$			
MULTIPLE DEPENDENT CLAIM(S) (if applicable)		Total claims		- 20 =	0	x \$ 50	\$			
MULTIPLE DEPENDENT CLAIM(S) (if applicable)  TOTAL OF ABOVE CALCULATIONS = \$  Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by ½.  SUBTOTAL = \$  Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).  TOTAL NATIONAL FEE = \$  Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property  TOTAL FEES ENCLOSED = \$ 170.00  ***IRKAYPAGH 00000118 10531041**  Itanum to be refunded: \$ Amount to be refunded: \$ Amount to be charged: \$ Amount to be charged: \$ \$ Amount to be charged: \$ \$ Amount to be charged: \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		Independent clai	ms	- 3 =	0	x \$200	\$			
TOTAL OF ABOVE CALCULATIONS = \$  Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.  Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(1)).  TOTAL NATIONAL FEE = \$  Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property		MULTIPLE DEP	ENDENT CLAIM(S	) (if applicable)		+ \$360				
Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by ½.  SUBTOTAL = \$  Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest than 30 months from from the ear				, (·· - <b>FF</b> ···	TOTAL OF ABOVE					
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).  TOTAL NATIONAL FEE = \$  Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31), \$40.00 per property		Applicant cla	aims small entity st	atus. See 37 CF	R 1.27. Fees above are reduc	ed by 1/2.				
claimed priority date (37 CFR 1.492(f)).  TOTAL NATIONAL FEE = \$  Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property						SUBTOTAL =	s			
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				ns from the earliest	\$ 130.00					
by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property  TOTAL FEES ENCLOSED = \$ 170.00  10/24/200			-		TOTAL	NATIONAL FEE =	\$			
Amount to be refunded:  130.00 @P  a.						•	\$ 40.00			
10/24/2005 HRHTPHilm 00000118 10331011  1 130,00 @P  a.					TOTAL F	EES ENCLOSED =	\$ 170.00			
a. A check in the amount of \$	10/24/200	HKAYPAGH 0000	00118 10531041					l s		
a. A check in the amount of \$ 170.00 to cover the above fees is enclosed.  b. Please charge my Deposit Account No. 04-1679 in the amount of \$ to cover the above fees. A duplicate copy of this sheet is enclosed.  c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit to Account No. 04-1679 A duplicate copy of this sheet is enclosed.  d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.  NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filled and granted to restore the International Application to pending status.  SEND ALL CORRESPONDENCE TO:  DUANE MORRIS LLP  1667 K Street, N.W., Suite 700  Washington, D.C. 20006  Phone: 202.776.7800  46,285				ለለ በዐ						
b. Please charge my Deposit Account No. 04-1679 in the amount of \$ to cover the above fees.  A duplicate copy of this sheet is enclosed.  c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit to Account No. 04-1679 Aduplicate copy of this sheet is enclosed.  d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.  NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.  SEND ALL CORRESPONDENCE TO:  DUANE MORRIS LLP  1667 K Street, N.W., Suite 700  Washington, D.C. 20006  Phone: 202.776.7800  Facesimiley: 202.776.7801	01 FC:161	,	130.	VV UP				\$		
A duplicate copy of this sheet is enclosed.  c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit t Account No. 04-1679 . A duplicate copy of this sheet is enclosed.  d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.  NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.  SEND ALL CORRESPONDENCE TO:  DUANE MORRIS LLP  1667 K Street, N.W., Suite 700  Washington, D.C. 20006  Phone: 202.776.7800  Eacsimile: 202.776.7801			CT.							
Account No. 04-1679 A duplicate copy of this sheet is enclosed.  d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.  NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.  SEND ALL CORRESPONDENCE TO:  DUANE MORRIS LLP  1667 K Street, N.W., Suite 700  Washington, D.C. 20006  Phone: 202.776.7800  Facelimile: 202.776.7801										
be included on this form. Provide credit card information and authorization on PTO-2038.  NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.  SEND ALL CORRESPONDENCE TO:  DUANE MORRIS LLP  1667 K Street, N.W., Suite 700  Washington, D.C. 20006  Phone: 202.776.7800  Face imile: 202.776.7801										
and granted to restore the International Application to pending status.  SEND ALL CORRESPONDENCE TO:  DUANE MORRIS LLP  1667 K Street, N.W., Suite 700  Washington, D.C. 20006  Phone: 202.776.7800  Facetimile: 202.776.7801  46,285										
DUANE MORRIS LLP  1667 K Street, N.W., Suite 700  Washington, D.C. 20006  Phone: 202.776.7800  Face imile: 202.776.7801  46,285										
1667 K Street, N.W., Suite 700 Washington, D.C. 20006 Phone: 202.776.7800 Facsimile: 202.776.7801  46,285		SEND ALL COR	RESPONDENCE T	(1)						
1667 K Street, N.W., Suite 700 Washington, D.C. 20006 Phone: 202.776.7800 Faceimile: 202.776.7801  46,285		DUANE MO	BRIS LLP	SIGNATURE	- Carlor					
Washington, D.C. 20006 Phone: 202.776.7800 Faceimile: 202.776.7801 46,285	i		· · · · · ·		tois					
Phone: 202.776.7800 46,285			Washington, D.C. 20006 NAME							
1 Faccimile: 202 776 7801			Phone: 202.776.7800 46,285				·			
REGISTRATION NUMBER		Facsimile: 2					ON NUMBER			

Page 1 of 2



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P.O. But 1459 Abstracting, Viginia 22313-1450

U.S. APPLICATION NUMBER NO. FIRST NAMED APPLICANT ATTY. DOCKET NO.

10/531,041 Joseph P Kennedy GRA26 011

INTERNATIONAL APPLICATION NO.

Duane Morris 1667 K Street N W Suite 700 Washington, DC 20006 PCT/US03/32579

1A. FILING DATE FRIORITY DATE

10/16/2003 10/16/2002

CONFIRMATION NO. 5052 371 FORMALITIES LETTER

Date Mailed: 09/07/2005

# NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Copy of the International Application filed on 04/12/2005
- Copy of the International Search Report filed on 04/12/2005
- Copy of IPE Report filed on 04/12/2005
- U.S. Basic National Fees filed on 04/12/2005
- Priority Documents filed on 04/12/2005
- Specification filed on 04/12/2005
- Claims filed on 04/12/2005
- Abstracts filed on 04/12/2005
- Drawings filed on 04/12/2005

The applicant needs to satisfy supplemental fees problems indicated below.

The following items MUST be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.
- To avoid abandonment, a surcharge (for late submission of filing fee, search fee, examination fee or oath
  or declaration) as set forth in 37 CFR 1.492(h) of \$130 for a non-small entity, must be submitted with the
  missing items identified in this letter.

#### SUMMARY OF FEES DUE:

Page 2 of 2

• \$130 Surcharge.

ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

A copy of this notice MUST be returned with the response.

#### VONDA M WALLACE

Telephone: (703) 308-9140 EXT 225

## PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO. 10/531,041	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.		
10.551,041	PCT/US03/32579	GRA26 011		

FORM PCT/DO/EO/905 (371 Formalities Notice)